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Reagents

CALCIUM CHLORIDE

For example, BDH Chemicals. Molar solution.

25mM solution: dilute 25 ml 1M solution to 1 litre in volumetric flask with distilled water.

OWREN'S BARBITURATE BUFFER pH 7.35

5.875 g sodium diethylbarbiturate (barbitone sodium)

7.335 g sodium chloride

- 1 Place in a volumetric flask and dissolve in approximately 780 ml distilled water.
- 2 Add 215 ml 0.1M hydrochloric acid.
- 3 Adjust volume to 1 litre with distilled water.
- 4 Check pH and adjust to pH 7.35, if necessary.

OWREN'S BUFFERED SALINE

200 ml Owren's barbiturate buffer

800 ml normal saline (0.9 g% sodium chloride)

GLYOXALINE BUFFER

2.72 g glyoxaline (imidazole)

4.68 g sodium chloride

- 1 Place in volumetric flask and dissolve in approx. 650 ml distilled water.
- 2 Add 148.8 ml 0.1M HCl, and adjust pH to 7.3.
- 3 Adjust volume to 1 litre with distilled water, if necessary.

REAGENTS FOR SCREENING TESTS

In the initial stages of investigation and diagnosis of bleeding disorders, selection and application of suitable screening test reagents, particularly for prothrombin time (PT) and activated partial thromboplastin time (APTT) tests, are of great importance. Many different reagents are available throughout the world. Where a wide choice is available, selection should take account of the variation in sensitivity. In screening for a bleeding disorder by PT and APTT, the following sources of information in relation to the likely performance of a particular reagent can be considered:

- comparative data in relation to other reagents from EQA schemes, such as the International EQA scheme (see Section 5)
- published data
- local testing of plasma from patients with known defects
- manufacturers' data sheets

Local production of PT and APTT reagents may be financially attractive, but it can cause standardization difficulties and therefore is best avoided.

It should also be noted that some manufacturers offer different reagents. In addition, the composition of reagents bearing the same name may be altered from time to time. This means that recommendations for the use of a particular source of material cannot be given.